

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

July 30, 2015

Prime Source, LLC c/o Ms. Cheryl Wagner Wagner Regulatory Associates, Inc. P.O. Box 640 Hockessin, DE 19707

Subject: Label Amendment – Adding directions for use on golf course turf and sod farms,

deleting directions for greenhouses Product Name: Bifen G/N 7.9SC Select EPA Registration Number: 89442-24 Application Date: May 5, 2015 Decision Number: 504956

Dear Ms. Wagner:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance

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with FIFRA section 6. If you have any questions, please contact me by phone at (703) 306-0415, or via email at <a href="mailto:davis.kable@epa.gov">davis.kable@epa.gov</a>.

Sincerely,

Kable Bo Davis, Product Manager 3 Invertebrate and Vertebrate Branch 1 Registration Division (7505P) Office of Pesticide Programs

Enclosure

GROUP 3A INSECTICIDE

# **RESTRICTED USE PESTICIDE Toxic to Fish and Aquatic Organisms**

For retail sale to and use only by certified applicators, or persons under their direction supervision, and only for those uses covered by the certified applicator's certification.

## Bifen G/N 7.9SC Select ABN: Bifen G/N 7.9F Select

Intended for Use and Storage by Commercial Applicators for Non-Food Use on Indoor and Outdoor Ornamentals, Nurseries,
Turf on Golf Courses and Sod Farms.

Active Ingredient:	By Wt.
Bifenthrin*	7.9%
Other Ingredients:	92.1%
Total:	100.0%

Contains 2/3 pound active ingredient per gallon.

## KEEP OUT OF REACH OF CHILDREN CAUTION

See other panels for additional precautionary information.

	FIRST AID			
	Call a poison control center or doctor immediately for treatment advice.			
	Have person sip a glass of water if able to swallow.			
If Swallowed	Do not induce vomiting unless told to do so by the poison control center or doctor.			
	Do not give anything by mouth to an unconscious person.			
	Move person to fresh air.			
If Inhaled	• If person is not breathing, call 911 or an ambulance, then give artificial respiration,			
	preferably by mouth-to-mouth if possible.			
	Call a poison control center or doctor for further treatment advice.			
	Take off contaminated clothing.			
If On Skin Or	Rinse skin immediately with plenty of water for 15-20 minutes.			
Clothing	Call a poison control center or doctor for treatment advice.			
	Hold eye open and rinse slowly and gently with water 15-20 minutes.			
If In Eyes	If In Eyes • Remove contact lenses, if present, after the first 5 minutes, then continuing rinsing eye.			
	Call a poison control center or doctor for treatment advice.			

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information concerning this product, call the poison control center at **1-800-222-1222**.

**Note to Physician** - This product is a pyrethroid. If large amounts have been ingested, the stomach and intestine should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided.

EPA Reg. No. 89442-24

EPA Est. No. XXXXX-XX-XXX

#### Manufactured For:

Prime Source, LLC 4609 E. Boonville-New Harmony Rd Evansville, IN 47225 **ACCEPTED** 07/30/2015

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

89442-24

**Net Contents** 

<sup>\*</sup>Cis isomers 97% minimum, trans isomers 3% maximum.

#### PRECAUTIONARY STATEMENTS

#### **Hazards to Humans and Domestic Animals**

**CAUTION** - Harmful if swallowed, inhaled or absorbed through skin. Avoid contact with skin, eyes, or clothing. Avoid breathing dust, vapor, or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

#### PERSONAL PROTECTION EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride, and viton.

#### Applicators and other handlers must wear:

- long sleeved shirt and long pants
- shoes and socks
- · chemical resistant gloves made of the materials listed above

#### Mixers and Loaders must wear:

- long sleeved shirt and long pants
- shoes and socks
- chemical resistant gloves made of the materials listed above
- protective eyewear

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### USER SAFETY RECOMMENDATIONS

#### **Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is extremely toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and run-off from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops if bees are visiting the treatment area.

## **DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during treatment. For any requirements specific to your State or tribe, consult the agency responsible for pesticide regulation.

Do not apply this product through any kind of irrigation system.

## AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or neoprene rubber or polyvinyl
  chloride or viton
- Shoes plus socks

#### NON-AGRICULTURAL USE REQUIREMENTS

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The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, and greenhouses.

Do not allow people or pets on treated surfaces until the spray has dried.

#### SPRAY DRIFT PRECAUTIONS

#### **BUFFER ZONES**

**Vegetative Buffer Strip:** Construct and maintain a minimum 10-foot-wide vegetative filter strip of grass or other permanent vegetation between the field edge and down gradient aquatic habitat (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes or natural ponds; estuaries; and commercial fish farm ponds).

Only apply products containing lambda-cyhalothrin onto fields where a maintained vegetative buffer strip of at least 10 feet exists between the field and down gradient aquatic habitat.

For guidance, refer to the following publication for information on constructing and maintaining effective buffers: *Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services. USDA*, NRCS. 2000. Fort Worth, Texas. 21 pp. <a href="http://www.nrcs.usda.gov/Internet/FSE\_DOCUMENTS/nrcs143\_023819.pdf">http://www.nrcs.usda.gov/Internet/FSE\_DOCUMENTS/nrcs143\_023819.pdf</a>

**Buffer Zone for Ground Application (groundboom, overhead chemigation, or airblast):** Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, marshes, natural ponds, estuaries, and commercial fish ponds).

#### SPRAY DRIFT REQUIREMENTS

**Wind Direction and Speed:** Only apply this product if the wind direction favors on-target deposition. Do not apply when the wind velocity exceeds 15 mph.

**Temperature Inversion:** Do not make applications into temperature inversions. Inversions are characterized by stable air and increasing temperatures with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

**Droplet Size:** Use only Medium or coarser spray nozzles according to ASAE (S572) definition for standard nozzles. In conditions of low humidity and high temperatures, applicators should use a coarser droplet size.

## ADDITIONAL REQUIREMENTS FOR GROUND APPLICATIONS

- Wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application.
- For ground boom applications, apply using a nozzle height of no more than 4 feet above the ground or crop canopy.
- For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. To minimize spray loss over the top in orchard applications, spray must be directed into the canopy.

#### APPLICATION INSTRUCTIONS

Note: California Restriction: Users in the state of California must have state-specific 24(c) supplemental labeling before applying this product.

**Bifen G/N 7.9SC Select** controls listed insects and mites on trees, shrubs, foliage plants, non-bearing fruit and nut trees, and flowers. Non-bearing crops are perennial crops that will not produce a harvestable raw agricultural commodity during the season of application.

Spreader stickers are not necessary with Bifen G/N 7.9SC Select.

**Bifen 7.9SC Select** can be tank-mixed with other pesticides, insect growth regulators and other aqueous carriers. When tank mixing **Bifen G/N 7.9SC Select** with other pesticides, follow the most restrictive precautions and limitations on each separate product label. The physical compatibility of **Bifen G/N 7.9SC Select** may vary with different combinations of pesticide products, and local cultural practices. If any tank mixture which has not been previously tested, it should be tested on a small scale (pint or quart jar), using the proper proportions of pesticides and water to ensure the physical compatibility of the mixture.

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Follow this procedure for preparing a new tank mix, unless specified otherwise in label directions:

- 1) Add wettable powder to tank water; mix well.
- 2) Add liquids and flowables; mix well.
- 3) Add emulsifiable concentrates; mix well.

If a mixture is incompatible following this order of addition, try reversing the order of addition, or increase the volume of water. **Note:** If the tank-mixture is compatible after increasing the amount of water, then the sprayer will need to be recalibrated for a higher volume application. Do not allow tank mix to stand overnight.

**Maximum Rates:** Do not use more than 0.5 oz. **Bifen G/N 7.9SC Select** per 1,000 sq. ft. in an individual treatment. Reapplications must be at intervals of 30 days or longer.

#### RESISTANCE MANAGEMENT

Some insects are known to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, the use of this product must conform to resistance management strategies established for the use area. Consult your local or state pest management authorities for details. If resistance to this product develops in your area, this product, or other products with a similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and suspect that resistance is a reasonable cause, immediately consult your local company representative or pest management advisor for the best alternative method of control for you area.

#### Bifen G/N 7.9SC Select Dilution Chart

Application	Application	Fluid Ounces* of Bifen G/N 7.9SC Select			
Volume	Rate	Diluted to Specified Volumes of Finished Spray			
Gallons/Acre	Lbs. AI/A	1 Gallon	25 Gallons	50 Gallons	100 Gallons
	0.025	0.1	2.5	5.0	10.0
50	0.05	0.2	5.0	10.0	20.0
30	0.1	0.4	10.0	20.0	40.0
	0.2	0.8	20.0	40.0	80.0
	0.025	0.05	1.25	2.5	5.0
100	0.05	0.1	2.5	5.0	10.0
100	0.1	0.2	5.0	10.0	20.0
	0.2	0.4	10.0	20.0	40.0
	0.025	0.03	0.83	1.67	3.3
150	0.05	0.07	1.67	3.33	6.7
150	0.1	0.133	3.33	6.67	13.3
	0.2	0.266	6.67	13.33	26.7
	0.025	0.025	0.63	1.25	2.5
200	0.05	0.05	1.25	2.5	5.0
	0.1	0.1	2.5	5.0	10.0
	0.2	0.2	5.0	10.0	20.0
	0.025	-	0.5	1.0	2.0
250	0.05	-	1.0	2.0	4.0
250	0.1	-	2.0	4.0	8.0
	0.2	-	4.0	8.0	16.0
200	0.025	-	0.42	0.83	1.7
	0.05	=	0.83	1.67	3.3
300	0.1	=	1.67	3.33	6.7
	0.2	-	3.33	6.67	13.3

<sup>\*</sup>To convert to milliliters, multiply by 29.57

Do not use household utensils to measure Bifen G/N 7.9SC Select

## Formula for Determining the Active Ingredient Content of the Finished Spray Mixture:

To determine the percent active ingredient that is in the spray tank after mixing **Bifen G/N 7.9SC Select**, use the formula below:

(7.9)(Fl. Oz. of **Bifen G/N 7.9SC Select** added to tank = Percent a.i. of spray mix

#### **ORNAMENTALS**

Treat using 5-40 fl. oz. (0.2 lb. AI/A) of **Bifen G/N 7.9SC Select**. As long as the highest label rate (40 fl. oz. or 0.2 lb. AI/A) is not exceeded, **Bifen G/N 7.9SC Select** can be diluted and applied in various amounts of water, and through low volume application equipment.

## **Application Rates for Ornamentals**

The treatment rates listed in the table below will control listed pests under normal conditions, although the applicator may choose to apply up to 40 fl. oz. (0.2 lb, AI/A) to control listed pests.

Pest	Application Rate Bifen G/N 7.9SC Select
Aphids	
Bagworms <sup>1</sup>	
Cutworms	
Elm Leaf Beetles	5-10 fl. oz./acre
Fall Webworms	(0.025-0.05 lb. AI/A)
Lace Bugs	(0.023-0.03 lb. Al/A)
Leaf Feeding Caterpillars	
Plant Bugs (including <i>Lygus</i> spp.)	
Tent Caterpillars	

<sup>&</sup>lt;sup>1</sup>Bagworms: Apply when larvae begin to hatch and spray larvae directly. Applications when larvae are young will be most effective.

<sup>1</sup> fl. oz. -29.57 ml = 2 tablespoons = 6 teaspoons

Pest	Application Rate Bifen G/N 7.9SC Select
Beet Armyworm	
Black Vine Weevil (Adults)	
Brown Soft Scales	
Broad Mites	
Budworms	
California Red Scale (Crawlers) <sup>2</sup>	
Centipedes	
Citrus Thrips	
Clover Mites	
Crickets	
Diaprepes (Adults)	
Earwigs	
European Red Mite	
Flea Beetles	
Fungus Gnats (Adults)	
Grasshoppers	
Gypsy Moth Caterpillars	10-20 fl. oz./acre
Leafhoppers	(0.05-0.1 lb. AI/A)
Leafrollers	·
Mealybugs	
Millipedes	
Mites	
Orchid Weevil	
Pillbugs	
Pine Needle Scales (Crawlers) <sup>2</sup>	
San Jose Scales (Crawlers) <sup>2</sup>	
Sowbugs	
Spider Mites	
Spiders	
Thrips	
Tip Moths	
Twig Borers <sup>2</sup>	
Weevils <sup>2</sup>	
Whiteflies	
Ants	
Imported fire Ants (foraging ants)	
Japanese Beetle (Adult)	20-40 fl. oz./acre
Leafminers	(0.1-0.2 lb. AI/A)
Pecan Leaf Scorch Mite	·
Pine Shoot Beetle (Adults)	

<sup>&</sup>lt;sup>2</sup>Scale Crawlers and Twig Borers: Treat trunks, stems and twigs in addition to plant foliage.

Treat a small number of plants, and observe for one week to determine if certain cultivars are sensitivity to that final spray solution.

#### **Ornamental Use Precautions**

- Apply with ground equipment only.
- Apply using the largest nozzle size compatible with adequate coverage.

## **Ornamental Use Restrictions**

- Do not apply when wind direction favors downwind drift towards nearby water bodies.
- Do not apply when wind velocity exceeds 10 mph.
- Do not apply when a temperature inversion exists.
- Do not apply if rain is expected within 12 hours (or whatever time is necessary for the spray to dry).
- Do not apply within 25 feet of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds.
- Do not apply within 150 feet of aquatic areas when treating tall trees (>15 feed) from the ground with high-pressure sprays or during any application with air-assisted equipment (mist blower).

## Imported Fire Ant (IFA) Quarantine Treatment

To control imported fire ants (IFA) in potting media (including balled and containerized nursery-grown ornamental trees, shrubs, plants, flowers, conifers, bushes, Christmas trees, and non-bearing fruit and nut trees). **Bifen G/N 7.9SC Select** is approved for use in the USDA Imported Fire Ant Quarantine Program, and can be applied as a high-volume drench treatment, soil incorporated, or as a topical application.

#### **Soil Incorporation Instructions**

By sprinkling or spraying it into the media, incorporate the specified volume of **Bifen G/N 7.9SC Select** (see table below) per cubic yard of potting media by diluting it in water (typically 1 quart to 1 gallon per cubic yard of media). The applications are based on the dry bulk density of the potting media. This application will provide a 6-month certification period when used in according to USDA guidance.

## Soil Incorporation Application Rates Bifen G/N 7.9SC Select in Potting Media to Control Imported Fire Ants (IFA)

Potting Media, Bulk Density (lbs. cubic yard)	Fl. Oz. Bifen G/N 7.9SC Select in 1 cubic yard
200	1.9
400	3.8
600	5.7
800	7.6
1,000	9.5
1,200	11.4
1,400	13.3

Use proportional amounts of Bifen G/N 7.9SC Select for potting media with bulk densities not listed.

#### **Topical Application Instructions**

Mix **Bifen G/N 7.9SC Select** in 1,000 ounces of water based on container size and bulk density of the potting media (see table below). Use 1 oz. of the mixture, evenly distributing it over the potting media surface of each container. After treating, irrigate all treated containers with 1.5 inches of water. This application will provide a 6-month certification period when used according to USDA guidance.

Topical Drench Application Rates to Control Imported Fire Ants (IFA) in Potting Media

Potting Media, Bulk Density	Fl. Oz. Bifen G/N 7.9SC	Select in 1,000 oz. water
(lbs. cubic yard)	3 Quart Container	4 Quart Container
200	3.5	5.2
400	7.2	10.4
600	10.8	15.6
800	14.4	20.8
1,000	18.0	26.0
1,200	21.6	31.2
1.400	25.2	36.4

Use proportional amounts of Bifen G/N 7.9SC Select for potting media with bulk densities not listed.

#### **High Volume Drench Instructions**

Mix the appropriate amount of **Bifen G/N 7.9SC Select** based on the bulk density of the media in 100 gallons of water (see table below). Use **Bifen G/N 7.9SC Select** as a high-volume treatment drenching each of the containers to the point of saturation, normally 1/5 volume of the container. This application will provide a 6-month certification period when used according to USDA guidelines.

High Drench Application Rates to Control Imported Fire Ants (IFA) in Potting Media

Potting Media, Bulk Density (lbs. cubic yard)	Fl. Oz. Bifen G/N 7.9SC Select in 100 gallons
200	2.4
400	4.8
600	7.2
800	9.6
1,000	12.0
1,200	14.4
1,400	16.8

Use proportional amounts of **Bifen G/N 7.9SC Select** for potting media with bulk densities not listed. **Larvae Control in Potting Media of Containerized Plants** 

## **Preventative Treatment**

Application Type	Pest	Application Instructions
Bare Root Treatment	Root Weevil Larvae	-Use 1 gallon in 100 gallons of water to treat bare roots of plants being transplanted into the fieldDip the roots into the <b>Bifen G/N 7.9SC Select</b> solution or spray the roots directly for 10 seconds.
Media Incorporation	-Refer to the table below to incorporate the specified v of <b>Bifen G/N 7.9SC Select</b> per cubic yard of potting m by diluting it with water (1 quart – 1 gallon per cubic y media), then sprinkle or spray solution into the media.  -Use the higher rate within the specified rate range for extended control.	
Tarial David	Black Vine Weevil Larvae	-Apply 10-40 fl. oz./100 gallons (0.05-0.2 lb. AI/A).  - Drench media container at 4-8 fl. oz. of finished spray per 6" container-diameter. Use a proportional volume of finished spray for containers <6" diameter.  -Treat to saturate (usually 1/5 volume of the container).  -To control pests for 1 growing season: Apply 10 fl. oz./100 gallons <b>Bifen G/N 7.9SC Select</b> finished spray applied to 6" containers in the spring.  -To control pests for 2 growing seasons: Apply 20-40 fl. oz./100 gallons of <b>Bifen G/N 7.9SC Select</b> finished spray applied to 6" containers in the spring.
Topical Drench	Grub, White, Japanese Beetle, Oriental Beetle, European Chafer	-Apply 40-80 fl. oz./100 gallons (0.2-0.4 lb. AI/A).  - Drench media container at 4-8 fl. oz. of finished spray per 6" container-diameter. Use a proportional volume of finished spray for containers <6" diameter.  -Treat to saturate (usually 1/5 volume of the container).  -Apply the higher rate within the specified rate range for longer period of control.
	Fungus Gnat Larvae	-Apply 20-40 fl. oz./100 gallons (0.1-0.2 lb. AI/A).  - Drench media container at 4-8 fl. oz. of finished spray per 6" container-diameter. Use a proportional volume of finished spray for containers <6" diameter.  -Treat to saturate (usually 1/5 volume of the container).

Potting Media,	Fluid Ounces of Bifen G/N 7.9SC Select in 1 cubic yard)			ard)
Bulk Density (lbs. cubic yard)	10 ppm	15 ppm	20 ppm	25 ppm
200	0.4	0.6	0.8	1.0
300	0.6	0.9	1.2	1.5
400	0.8	1.2	1.6	2.0
500	1.0	1.5	2.0	2.5
600	1.2	1.8	2.4	3.0
700	1.4	2.1	2.8	3.5
800	1.6	2.4	3.2	4.0
900	1.8	2.7	3.6	4.5
1,000	2.0	3.0	4.0	5.0

The application rates listed above are based on dry bulk density of the potting media. For potting media with dry bulk densities not listed, use proportional volumes of **Bifen G/N 7.9SC Select**.

## **Larvae Control in Potting Media of Containerized Plants Curative Treatment**

Application Type	Pest	Application Instructions
	Black Vine Weevil Larvae	-Apply 10-40 fl. oz./100 gallons (0.05-0.2 lb. AI/A).  - Drench media container at 8-16 fl. oz. of finished spray per 6" container-diameter. Use a proportional volume of finished spray for containers <6" diameter.  -Treat to saturate (usually 1/5 volume of the container).  -To control pests for 1 growing season: Apply 10 fl. oz./100 gallons <b>Bifen G/N 7.9SC Select</b> finished spray applied to 6" containers in the spring.  -To control pests for 2 growing seasons: Apply 20-40 fl. oz./100 gallons of <b>Bifen G/N 7.9SC Select</b> finished spray applied to 6" containers in the spring.
Topical Drench	Diaprepes Weevil Larvae	-Apply 10-40 fl. oz./100 gallons (0.05-0.2 lb. AI/A).  - Drench media container at 8-16 fl. oz. of finished spray per 6" container-diameter. Use a proportional volume of finished spray for containers <6" diameter.  -Treat to saturate (usually 1/5 volume of the container).  -Apply the higher rate within the specified rate range for longer period of control.
	Fungus Gnat Larvae	-Apply 10-40 fl. oz./100 gallons (0.05-0.2 lb. AI/A) Drench media container at 8-16 fl. oz. of finished spray per 6" container-diameter. Use a proportional volume of finished spray for containers <6" diameterTreat to saturate (usually 1/5 volume of the container).

## **Turf (Golf Courses and Sod Farms)**

#### New York state specific restrictions:

- Do not use **Bifen G/N 7.9SC Select** on golf courses and sod farms in Nassau County or Suffolk County, New York.
- Do not apply to any grass or turf within 100 feet of any body of water such as a lake, pond, river, stream, wetland, or drainage ditch.

#### New York state specific use instructions:

Make a single repeat application of **Bifen G/N 7.9SC Select** if there are signs of renewed pest activity, but wait a minimum of two weeks before making the  $2^{nd}$  application.

Apply **Bifen G/N 7.9SC Select** as a surface or sub-surface treatment. If treating dense/long turf foliage, apply volumes of up to 10 gallons per 1,000 sq. ft. for uniform coverage.

Low Volume Turf Applications (<2 gallons/1,000 sq. ft.): Irrigate the treatment area with a minimum of ¼ inch water immediately following treatment to ensure control of mole crickets and other sub-surface pests.

#### Turf (Golf Course and Sod Farms) Application Rates

The specified rates listed will provide control of listed pests under typical conditions. For heavy pest pressure or maximum residual control, apply **Bifen G/N 7.9SC Select** up to 20 fl. oz. (0.1 lb. AI/A). For ants, imported fire ants, and mole crickets, apply up to 40 fl. oz. (0.2 lb. AI/A).

Pest	Active Ingredient lb. per acre	Application Rate	Application Instructions
Ants Centipedes Crickets Earwigs Fleas, Adult Grasshoppers Leafhoppers Mealybugs Millipedes Pillbugs Sowbugs	0.05-0.1	10-20 fl. oz. 0.25-0.5 fl. oz. per 1,000 sq. ft.	
Annual Bluegrass Weevil (Hyperodes) Adults	0.05-0.1	10-20 fl. oz. 0.25-0.5 fl. oz. per 1,000 sq. ft.	Time treatment such at application is made when pests travel away from overwintering sites and are traveling to grass areas. Travel begins when <i>Forsythia</i> is in full bloom and ends when <i>Cornus florida</i> (flowering dogwoods) is in full bloom. Check with your State Cooperative Extension Service for additional information on time of application.
Armyworms Cutworms Sod Webworm	0.05	10 fl. oz. 0.25 fl. oz./1,000 sq. ft.	Do not irrigate or mow for 24-hours post-application. Higher rates within the specified rate range (20 fl. oz. (0.1 lb. AI/A)) may be required in high pest pressure and turf is taller than 1".
Billbugs, Adults	0.05-0.1	10-20 fl. oz. 0.25-0.5 fl. oz. per 1,000 sq. ft.	Treat when bugs first appear in April and May using degree day models for optimal control. Check with your State Cooperative Extension for additional information. Spring applications will also control overwintered chinch bugs in temperate climates.
Black Turfgrass Ataenius Adults	0.05-0.1	10-20 fl. oz. 0.25-0.5 fl. oz. per 1,000 sq. ft.	To control 1 <sup>st</sup> and 2 <sup>nd</sup> generation pests treat in May and July. The May treatment must occur to match the full-bloom stage of Vanhoutte spiraea ( <i>Spiraea vanhoutte</i> ) and horse chestnut ( <i>Aesculus hippocastanum</i> ). July treatment must match the blooming Rose of Sharon ( <i>Hibiscus syriacus</i> ).
Chinch Bugs	0.05-0.1	10-20 fl. oz. 0.25-0.5 fl. oz. per 1,000 sq. ft.	Irrigating turf prior to treatment may be necessary to optimize treatment to the base of turf plants where chinch bugs live. If turf is high or if thatch layer is excessive, use the higher rate within the specified rate range. Use 20 fl. oz. (0.1 lb. AI/A) to control adult and nymph chinch bugs in mid-summer.
Fleas, Larvae	0.1	20 fl. oz. 0.5 fl. oz. per 1,000 sq. ft.	Flea larvae mature in shady areas where pets and other animals are most likely to be found. Use a higher volume treatment within the specified rate range to ensure pesticide penetrates soil. If the lawn is being treated with <b>Bifen G/N 7.9SC Select</b> at 10 fl. oz. (0.05 lb. AI/A) then the larval application rate can be obtained by doubling the application volume.
Imported Fire Ants	0.1	20 fl. oz. 0.5 fl. oz. per 1,000 sq. ft.	Make broadcast treatments in combination with mound drenches for optimal control. It is critical to use either high-volume treatments or to irrigate dry soil prior to application. Apply 40 fl. oz. (0.2 lb. AI/A) when making broadcast treatments. For mound treatments, dilute 1 teaspoon <b>Bifen G/N 7.9SC Select</b> per gallon of water and apply 1-2 gallons of diluted solution using sufficient water force to penetrate the soil and flood ant channels (do not use household measuring spoons). Treat a 4-foot diameter around each ant mound. Treat in cool weather (65-80°F), in the early morning, or late evening for best results. A spray rig that is calibrated to apply 40 fl. oz. (0.2 lb. AI/A) of <b>Bifen G/N 7.9SC Select</b> in 5 gallons/1,000 sq. ft. contains the approximate dilution (1 teaspoon/gallon) required for fire ant mound drenches in the spray tank.

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Pest	Active Ingredient lb. per acre	Application Rate	Application Instructions
Japanese		20 fl. oz.	
Beetle, Adult	0.1	0.5 fl. oz. per	
		1,000 sq. ft.	
Mites		10-20 fl. oz.	Apply <b>Bifen G/N 7.9SC Select</b> with a specified labeled rate of a
	0.05-0.1	0.25-0.5 fl. oz. per	surfactant for optimal control of eriophyid mites. Make a 2 <sup>nd</sup>
		1,000 sq. ft.	application 5-7 days after the initial application for optimal control.
Mole Crickets (Adults and Nymphs)	0.05-0.1	10-20 fl. oz. 0.25-0.5 fl. oz. per 1,000 sq. ft.	Mole Cricket Adults: Sustainable control of adult mole crickets is difficult due to high pest pressure in early spring when adults are active. Make applications as late in the day as possible and water in with up to ½" water immediately after treating. Irrigate the soil prior to treatment if soil is dry so that mole crickets will move closer to the soil surface.  Mole Cricket Nymphs: Treat heavy adult pest populations in the spring right before egg hatch when nymphs are at the soil surface and are most susceptible to insecticides. To sustain control of larger nymphs, use higher rates within the specified rate range. Make applications as late in the day as possible and water immediately after treatment with up to ½" water. Irrigate the soil prior to treatment if soil is dry so that mole crickets will move closer to the soil surface.
Ticks	0.1	20 fl. oz. 0.5 fl. oz. per 1,000 sq. ft.	Apply <b>Bifen G/N 7.9SC Select</b> to the entire area where ticks may live. Do not make spot treatments. Use higher spray volumes if applying to areas with dense ground cover or heavy leaf litter. For optimal control in high pest pressure, re-treatment may be necessary. Re-treat only if signs of continued or new activity are present. Do not make re-treatments more frequently than once in 7 days. <b>Deer Ticks</b> ( <i>Ixodes</i> , <b>spp.</b> ) have a 4-stage life cycle spanning 2 years. Treat in late fall and/or early spring to treat larval and nymph stages living in leaf litter and soil, and adults living in grass and low-lying vegetation above ground. <b>American Dog Ticks</b> invade suburban residential areas where former fields/wooded areas exist, and are likely to gather in paths and roadways where they are more likely to find a host. To control tick larvae, nymphs, and adults, treat as needed from midspring to early fall.
Ants Imported Fire Ants Mole Crickets	0.2	40 fl. oz. 1 fl. oz./1,000 sq. ft.	A single application of 40 fl. oz. (0.2 lb. AI/A) <b>Bifen G/N 7.9SC Select</b> may be applied once per year for larger infestations of ants, imported fire ants, and mole crickets.

#### Turf (Golf Course and Sod Farm) Use Precautions

- Apply with ground equipment only.
- Apply with nozzle no further than 2 feet from turf.
- Apply with nozzles that provide largest droplet size compatible with sufficient coverage.

## Turf (Golf Course and Sod Farm) Use Restrictions

- Do not apply when wind direction favors downwind drift towards nearby water bodies.
- Do not apply when wind velocity exceeds 10 mph.
- Do not apply when wind gusts exceed 10 mph.
- Do not apply when a temperature inversion exists.
- Do not apply if rain is expected within 12 hours (or whatever time is necessary for the spray to dry).
- Do not apply for surface-feeding pests.
- Do not apply within 25 feet of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds.
- Do not apply to water-logged, saturated turf that will not accept water/irrigation.

#### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. After partial use replace lids and close tightly. Do not put concentrate or dilute material into food or drink container.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Do not contaminate water, food, or feed by storage or disposal. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. Dispose of excess or waste pesticide by use according to label directions, or contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

#### **CONTAINER HANDLING:**

[NONREFILLABLE CONTAINERS] Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

(Nonrefillable container  $\leq$  5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(Nonrefillable  $\geq$  5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

#### CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

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